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### ***In Utero* Fine Particle Air Pollution and Placental Expression of Genes in the Brain-Derived Neurotrophic Factor Signaling Pathway: An ENVIRONAGE Birth Cohort Study**

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**Table S1.** Primer assays for selected genes and their RefSeq number.

**Table S2.** Within-placenta and between-placenta variability of the two placental biopsies for each gene.

**Table S3.** Correlations between genes in the *Bdnf* signaling pathway.

**Table S4.** Exposure characteristics of NO<sub>2</sub> (n = 90).

**Figure S1.** Difference in placental gene expression in association with *in utero* exposure to fine particle air pollution (PM<sub>2.5</sub>) during various time windows (single-gene models; n=90). The effect estimates are the percent difference (95% CI) relative to mean gene expression for a 5 µg/m<sup>3</sup> increment of PM<sub>2.5</sub> exposure (µg/m<sup>3</sup>). Time window specific PM<sub>2.5</sub> exposures (µg/m<sup>3</sup>) were calculated by averaging the daily interpolated PM<sub>2.5</sub> concentrations for various periods during pregnancy: each of the three trimesters. Estimates were adjusted for newborn's gender, maternal age, maternal education, gestational age, cord blood insulin, placental biopsy site, delivery date, season at birth and NO<sub>2</sub> exposure. \* p < 0.05